## **REMARKS**

The Official Action of 14 June 2007 has been carefully considered and reconsideration of the application as amended is respectfully requested.

The Abstract has been amended to remove the basis for the Examiner's objection at paragraph 1 of the Official Action. The claims have been amended to remove the bases for the Examiner's rejections at paragraph 3 of the Official Action. All claims as amended are respectfully believed to be sufficiently definite to satisfy the dictates of 35 USC 112, second paragraph.

Claims 1-11 have been rejected under 35 USC 102 (e) as allegedly being anticipated by each of Hanmura et al (paragraph 8 of the Official Action) and Oki et al (paragraph 10 of the Official Action). Applicants submit herewith an English translation of their Japanese priority application, filed September 30, 2003 (prior to the effective filing dates of the references), to overcome the references in accordance with the provisions of MPEP 201.15.

Claims 1-3 and 8-11 stand rejected under 35 USC 103(a) as allegedly being unpatentable over JP 2003/246942. Applicants respectfully traverse this rejection.

The claimed invention is based at least in part upon Applicants' discovery that, in an ink composition containing a dye of formula (1), the provision of the recited aromatic compound having a carboxyl group (or a salt thereof) will improve the moisture resistance of the composition while keeping (not impairing) the effects of the dye of formula (1) on light fastness and gas fastness, and while making these effects compatible. This is shown, by way of example, in the Examples in the present specification.

In particular, it may be seen from Table 8 on page 57 of the specification that the ink compositions of Examples 1-10, comprising the recited dye of formula (1) and the recited aromatic compound with carboxyl group (see Table 7 on page 51), performed better in the evaluation for moisture resistance (see evaluation criteria on pages 54-55) than the Comparative Examples 1-3 which do not contain the recited aromatic compound with carboxyl group (see Table 7 on page 51). On the other hand, the results in Table 7 show that Examples 1-10 performed as well as Comparative Examples 1-3 in each of the evaluations for light fastness and gas fastness (see evaluation criteria on pages 52-54).

The cited reference, JP 2003/246942, discloses an ink comprising a dye of formula (1) and also discloses that the ink may optionally include additives such as a desiccation inhibitor (wetting agent), tenebrescence inhibitor, emulsion stabilizer, an osmosis accelerator, an ultrviolet ray absorbent, antiseptics, an antifungal agent, pH regulator, a surface tension regulator, a defoaming agent, a viscosity controlling agent, a dispersant, a distributed stabilizer, a rest-proofer, and a chelating agent are mentioned by way of example (see JP 2003/246942 at [0061]). Accordingly, it may be appreciated that the additives that may optionally be included in the ink composition described in the reference is almost limitless. If and only if an antifungal agent were included in the composition as an additive, and if and only if such antifungal agent were to include sodium benzoate, would one of skill in the art arrive at a composition comprising both the recited dye of formula (1) and the recited aromatic compound with carboxyl group. Significantly, however, JP 2003/246942 provides no teaching or suggestion of the advantageous effects in moisture resistance that may be achieved by incorporating the recited aromatic compound into the claimed composition while maintaining the effects of the recited dye of formula (1) on light fastness and gas fastness (see discussion above).

Under these circumstances, Applicants respectfully submit that (a) in view of the

huge size of the genus of possible ink compositions encompassed by the cited reference, the reference does not set forth even a *prima facie* case of obviousness for the claimed species (*In re Baird*, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994) (holding that the fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness); and (b) the evidence of record in the specification (see discussion above) would be sufficient to rebut any *prima facie* case of obviousness set forth by the cited art in any event. Accordingly, Applicants respectfully request withdrawal of this rejection.

Claims 1-11 stand rejected for alleged nonstatutory obviousness-type double patenting over claims 1, 7, 18, 19, 34 and 35 of US Patent 7,211,132. However, although claims 18 and 19 of the '132 patent recite the claimed aromatic compound having a carboxyl group, claims 1, 18, 19, 34 and 35 do not recite the claimed dye of formula (1). (Note: the claimed dye of formula (1) is distinct from the dye of formula (2) recited in claims 1, 18, 19, 34 and 35 of the '132 patent.) Claim 7 of the '132 patent does recite the claimed dye of formula (1) (i.e., the dye of formula (4)in the '132 patent), but this claim does not recite the claimed aromatic compound having a carboxyl group. Thus, no claim of the '132 patent claims an invention that is the same as or patentably indistinct from the claims of the present application whereby the issuance of a patent on the present claims would not result in an unjustified extension of the right to exclude others from practicing the claimed subject matter. Accordingly, withdrawal of the rejection is respectfully requested.

Claims 1-11 stand provisionally rejected for alleged nonstatutory

obviousness-type double patenting over claims 1, 3, 4, 6, 9, 11-16 and 18-21 of copending Application No. 10/951,446. However, as discussed above, the claimed invention is based upon Applicants' discovery that the provision of the recited aromatic compound having a carboxyl group (or a salt thereof) improves the moisture resistance of an ink composition comprising the dye of formula (1) while keeping (not impairing) the effects of the dye of formula (1) on light fastness and gas fastness. As such, the presently claimed invention is based upon Applicants' realization that the recited dye of formula (1) by itself could provide the claimed ink composition with advantageous properties without the need for an additional dye. In contrast, the claims of the co-pending application require the additional inclusion in the ink compositions claimed therein of the dye of formula (2) (and optionally the dye of formula (3)). (This is in line with the teachings in the co-pending application that such ink compositions realize, for example, improved light fastness and gas fastness.) It would not have been obvious from the claims of the co-pending application that an ink composition comprising the claimed dye of formula (1) and aromatic compound having a carboxyl group could realize the advantageous effects discussed above without the inclusion of the dye of formula (2). Accordingly, Applicants respectfully submit that the present claims are patentably distinct from the claims of the copending application and request withdrawal of the double patenting rejection.

In view of the above, Applicants respectfully submit that all rejections and objections of record have been overcome and that the application is now in allowable form. An early notice of allowance is earnestly solicited and is believed

to be fully warranted.

Respectfully submitted,

CLIFFORD J. MASS LADAS & PARRY LLP 26 WEST 61ST STREET NEW YORK, NEW YORK 10023 REG. NO.30,086(212)708-1890

## **ABSTRACT**

Problem to be Solved:

To provide an ink composition having high reliability in terms of clogging or the like and compatibly having all of light fastness, gas fastness and moisture resistance.

Means to Solve the Problem:

An ink composition comprising containing at least water, at least one member selected from a compound represented by formula (1) shown below and a salt thereof, and at least one member selected from an aromatic compound having a carboxyl group and a salt thereof:

Formula (1):

[Chem. 7]

$$A-N=N$$

$$G$$

$$R^{5}$$

$$R^{6}$$

In formula (1), A represents a residue of a 5-membered heterocyclic diazo component  $A-NH_2$ ;  $B^1$  and  $B^2$  each represents  $-CR^1=$  or  $-CR^2=$ , or either one of  $B^1$  and  $B^2$  represents a nitrogen atom and the other represents  $-CR^1=$  or  $-CR^2=$ ;  $R^5$  and  $R^6$  each independently represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group or the like; and G,  $R^1$  and  $R^2$  each independently

ميسر ئ